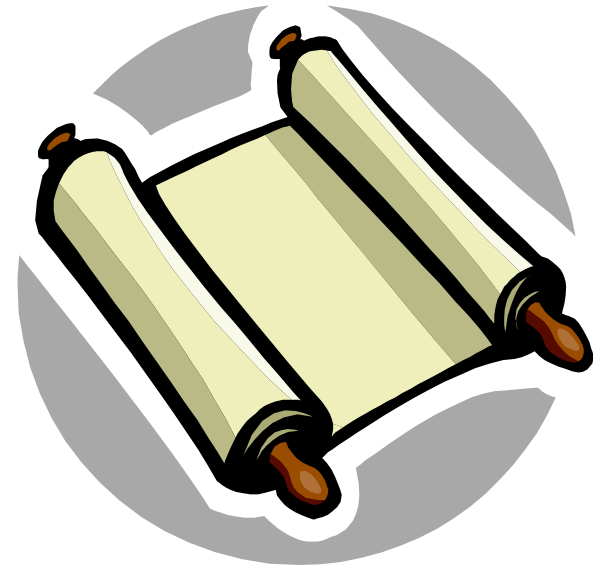# DES QA System Training For Program Managers

Robert Minicucci

Assistant QA Manager

Quality Management Plan Awareness

- What is it?

- Who's involved?

- What will we have to do?

Handouts

- These slides

- DES Quality Policy

- List of Definitions

- Evaluation Form

What's A QMP?

- A documented plan describing how we deal with environmental data.

- A requirement of accepting EPA funds since the Carter Administration

- ***DES's QMP covers the entire department***

- DES has EPA-approved QMP - 7/01

Info on the DES Intranet

- See "Quality Assurance at DES"
  - Under "News/Information"
  - The QMP
  - Implementation Guidance
  - FAQs
  - Policy, Team Roster

Why?

- You know your own job.

- You've been doing it for a long time.

- By now, it comes naturally to you.

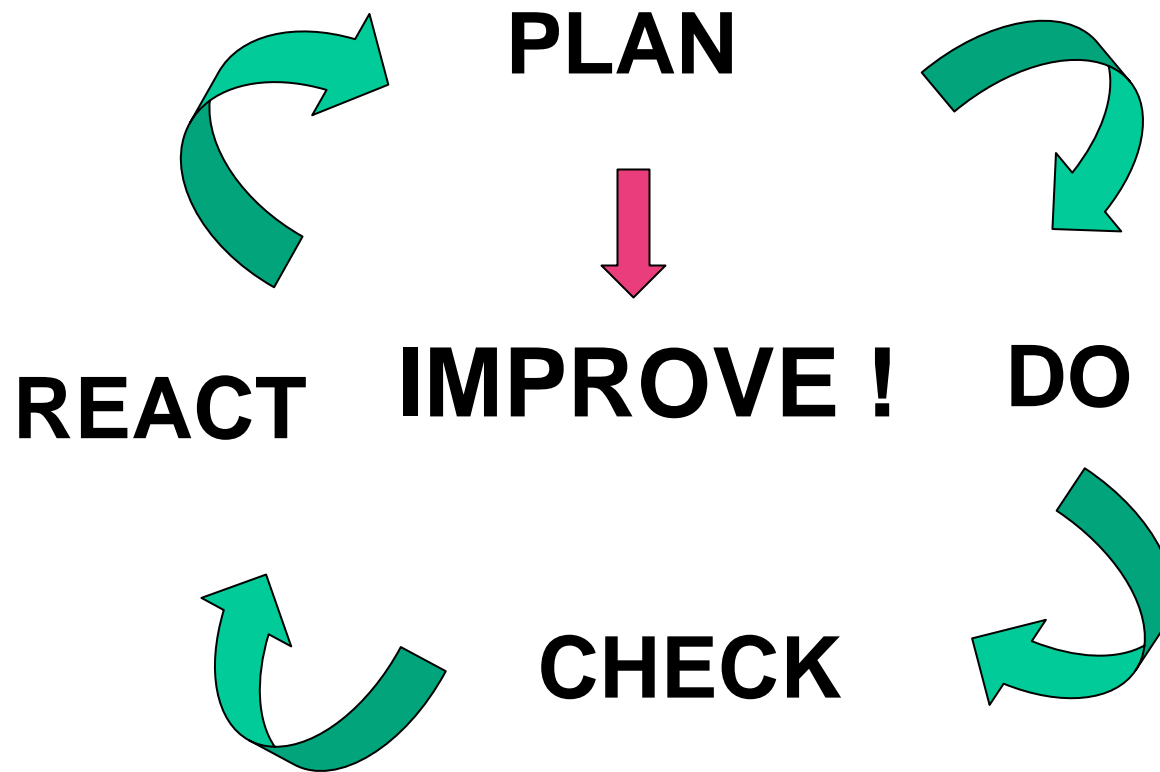- Nothing could possibly go wrong, right ?

Think Again.

# The Art of Management

- An Older Model:

The Deming Model

PLAN

IMPROVE !

REACT

DO

CHECK

The DES QMP Specifically:

- Follows the "Deming" model
- Documents how we:
  - Plan   - Gather data,
  - Conduct tests   - Check the data,
  - Document and communicate results,
  - Store the information,
  - Check and improve the system
- **Avoid problems by thinking ahead**
- Follows EPA guidance, reviewed and approved by EPA New England.

Who's Involved

- QA Manager: Vince Perelli

- The QA Team:
  - Wendy Bonner; Andy Chapman; Bill Hall; Tom Croteau; Bob Minicucci; Sharon Perkins; Kendall Perkins; Rachel Rainey; and Vicki Whittemore

- All DES Program Managers
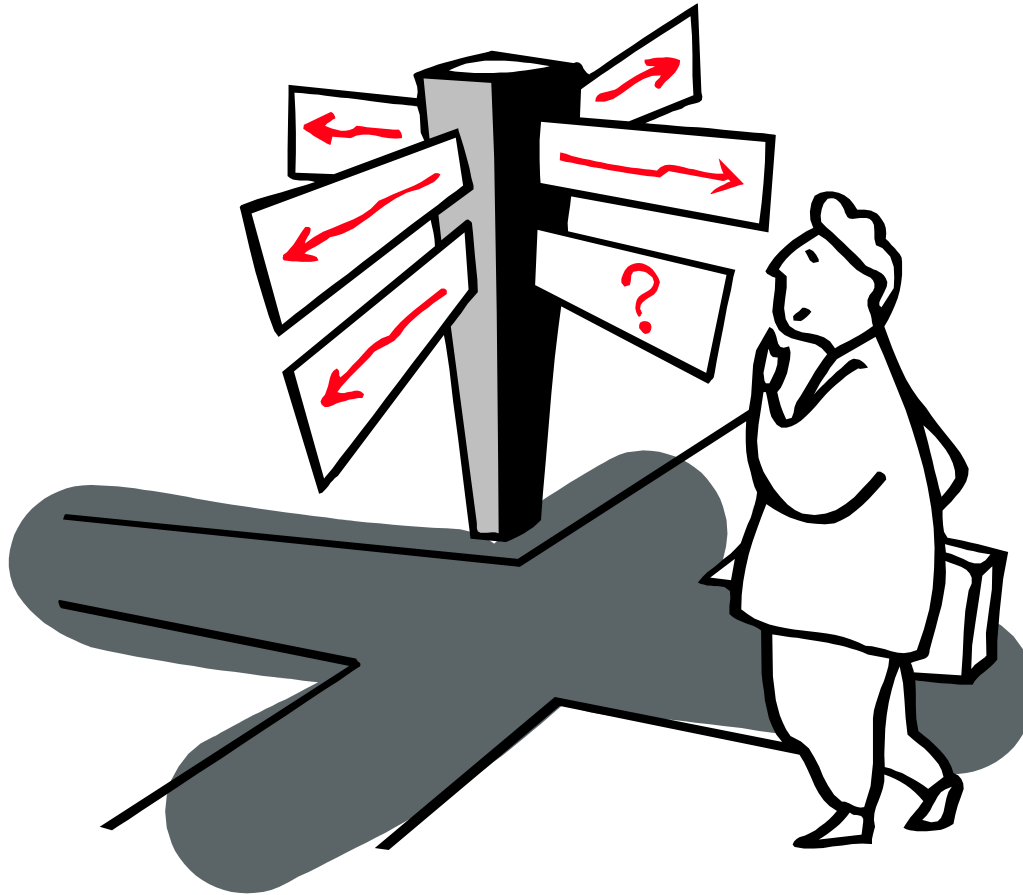 - (That's why you're here)
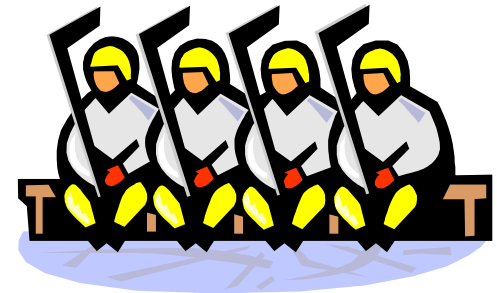
# What Will We Have To Do?
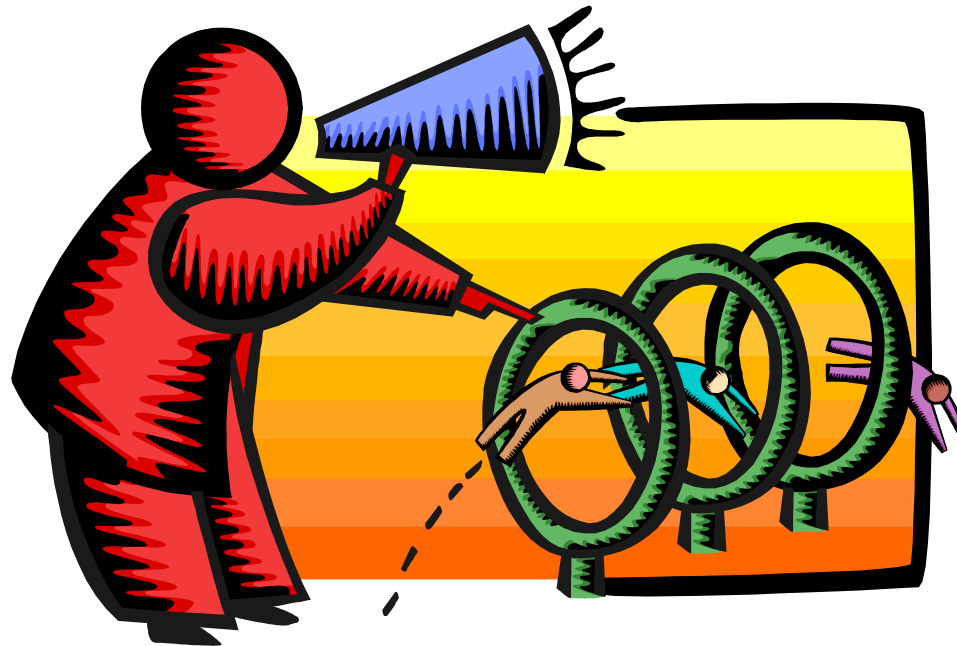
Topics

- Who's in
- Definitions
- Pieces of the System:
  - Plan; Do; Check; React
- Summary of Program Actions
- How QA Team will help

Are You In or Are You Out?

Environmental Data

- Any measurements or information that describe environmental processes, location, or conditions; ecological or health effects and consequences; or the performance of environmental technology.
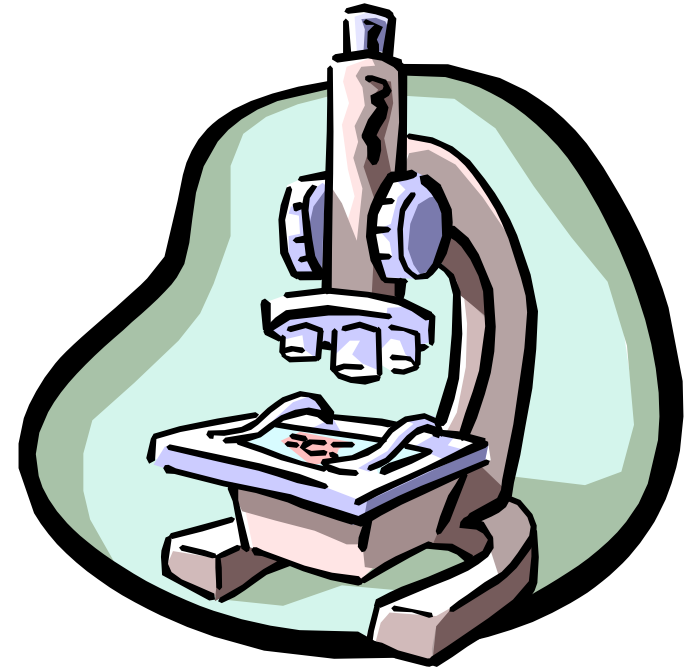
Your Program Is In If You:

- Take Samples

- Do Tests In-House

- Describe Field Conditions

- Do Tests in the Field

- Review, Analyze, or Report on Data Generated by Others

- Communicate the Results of Sampling or Testing

Documents & Records

- **<u>Document</u>**

- Any written, recorded information that is <u>*subject to revision over time*</u>. Procedures, plans, and policies are documents. Documents may be controlled. See Records.

- **<u>Records</u>**

- A completed "document" that provides <u>*objective evidence of an item or process*</u>. Records may include photographs, drawings, magnetic tape, or other data recording media. See Documents.

Program

- A functional unit conducting a defined program.
  - Often found at Bureau level, but it varies.
  - Example: the Limnology Program, Watershed Management Bureau, Water Division.
- The most important functional level in the DES QA System

People

- **Program Manager**

- **The person responsible for managing a specific DES program – usually an Administrator or Supervisor**

- **Project Manager**

- The person that has direct knowledge and/or responsibility at the project or site-specific level. Usually professional staff.

Data Quality Objective

- A central planning concept - Why are you doing this work?

- "Qualitative and quantitative statements that clarify study objectives, define the appropriate type, users, consumers and functional efficacy of data that will be used as the basis for establishing the quantity and quality of data needed to support decision-makers."

- DQO's have to be documented (i.e. Write it Down!)

Standard Operating Procedures

- A written document that details the method for an operation, analysis, or action, and that is officially approved.
- Very important in any system, including ours.
- K.I.S.S.
- Yup, sometimes they're QAPPs, or attached to a QAPP

Pieces of the System

PLAN

REACT   IMPROVE !   DO

CHECK
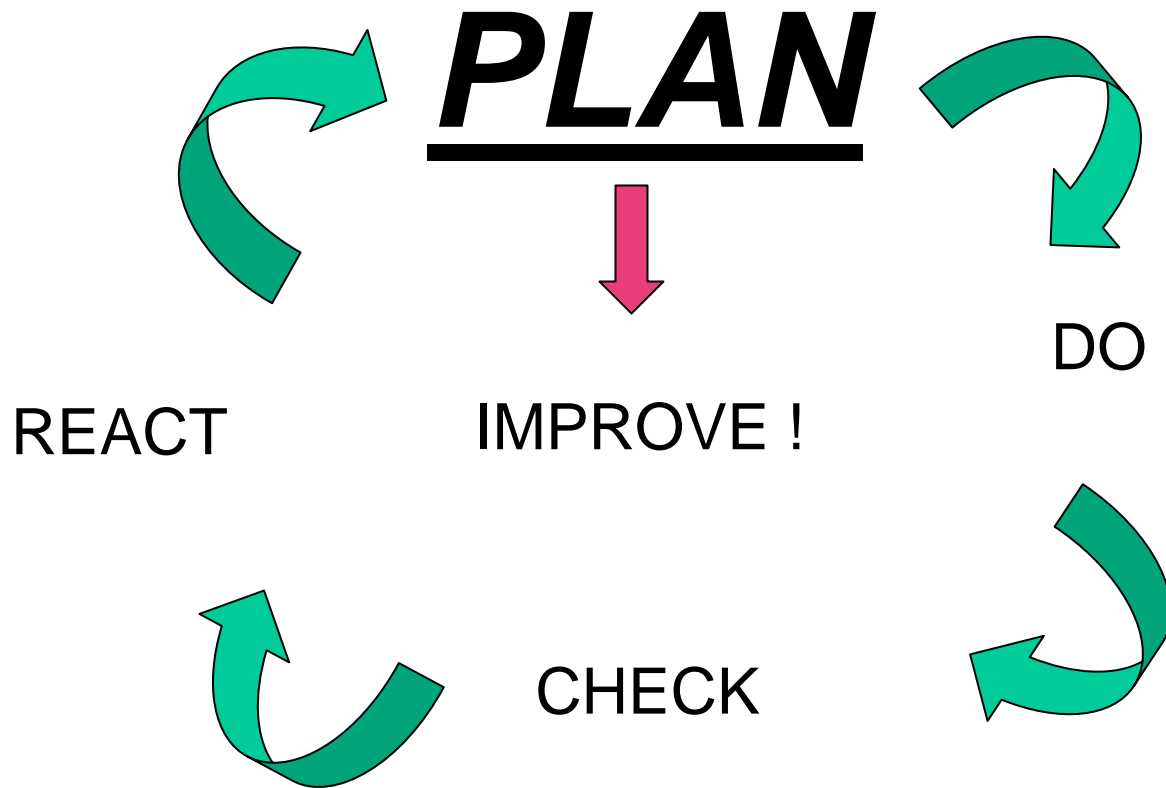
Planning Steps I

- Determine what data activities your program undertakes.

- Write down the results of this determination.

- Save the document in your Program QA Manual – with other program-administration materials that you have to keep.

Planning Steps II

- Why are you doing these data activities?

  - Figure it out (& write it down!):

    – Why do you need this data?

    – What decisions will be made with this data?

    – Who will use it – who are the customers/audience?

    – What legal requirements are being met?

Planning Steps III

- That list describes your *Data Quality Objectives*

- Tailor the level of the data quality to its uses

- If there's no use for the data – *Don't gather it!*

Pieces of the System
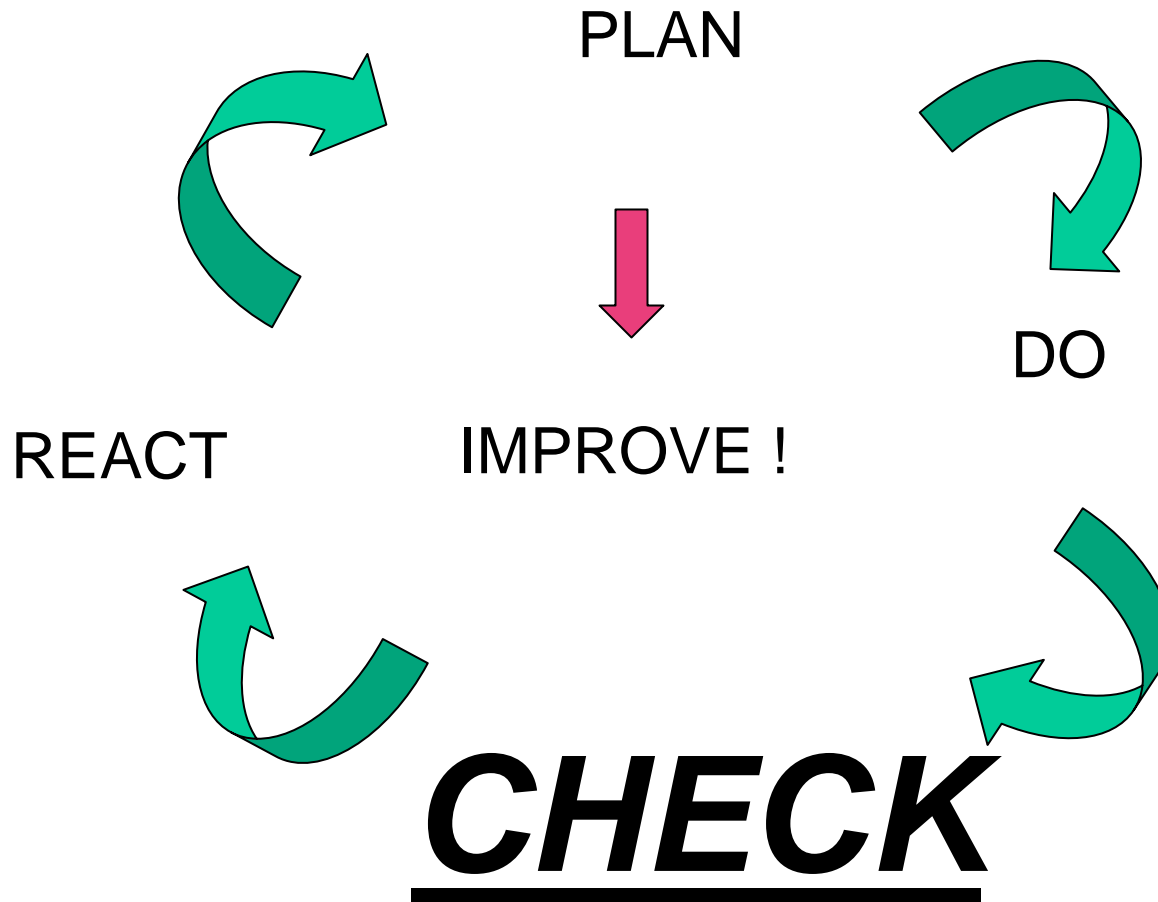
PLAN

DO

CHECK

IMPROVE !

REACT
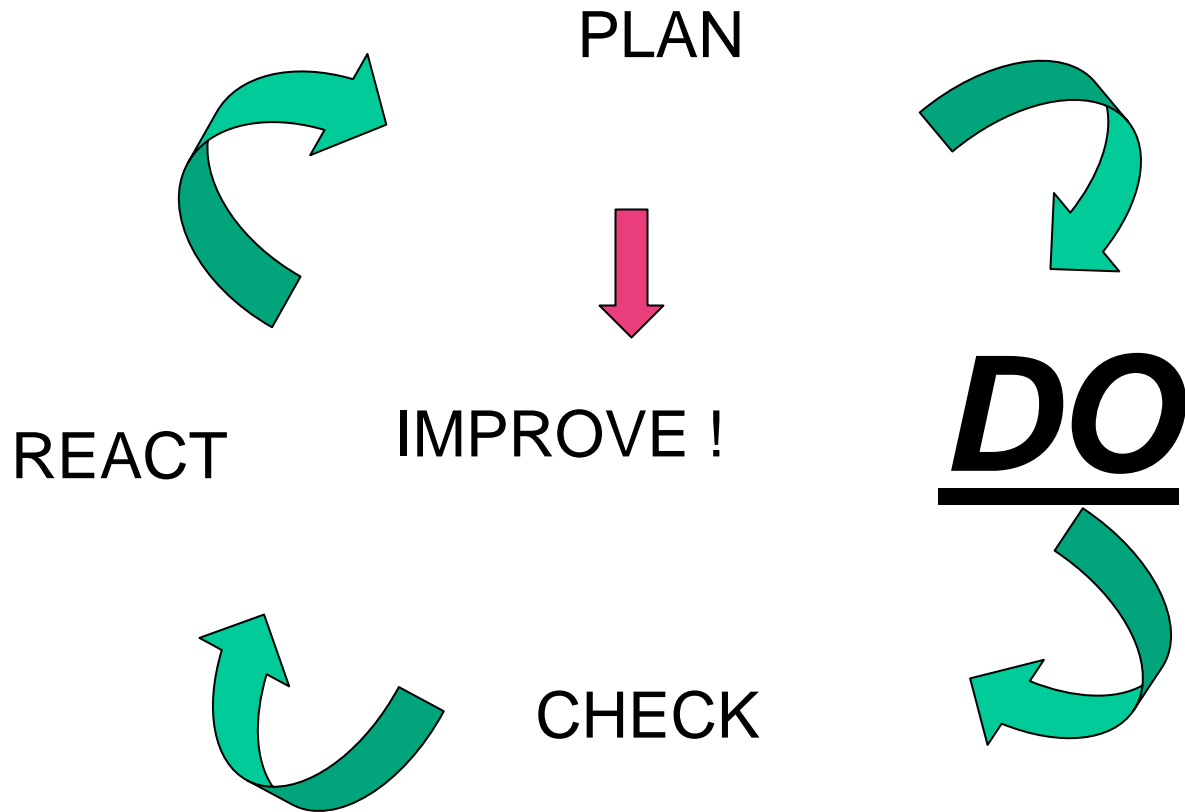
Do

- This is the easy part

- Keep on doin' what you're doin'

- Write down your procedures (SOPs)

- If you have to vary from SOPs, write down when & why

Pieces of the System

PLAN

DO

REACT

IMPROVE !

CHECK

Checking I

- At least annually check & record:

  - Do your procedures still meet your needs?
  - Are your procedures being used as written?
  - What problems came up?
  - What caused those problems?
  - What are you going to do to fix it?

Checking II

- This process is called "***Auditing***"
- Auditing can be:
  - "First Party": Self-checking
  - "Second Party": Someone else from DES checks you
 - "Third Party": An outside party (e.g. EPA) comes in

Checking III

- DES QA System is built around First Party audits
  - You check your self & report to the QA Manager
- There will be Second Party Audits by the QA Team
  - Random sampling
- Expect EPA to come in at some time to audit.

Checking IV

- Auditing is not a gotcha exercise

- It's a chance to find opportunities to improve
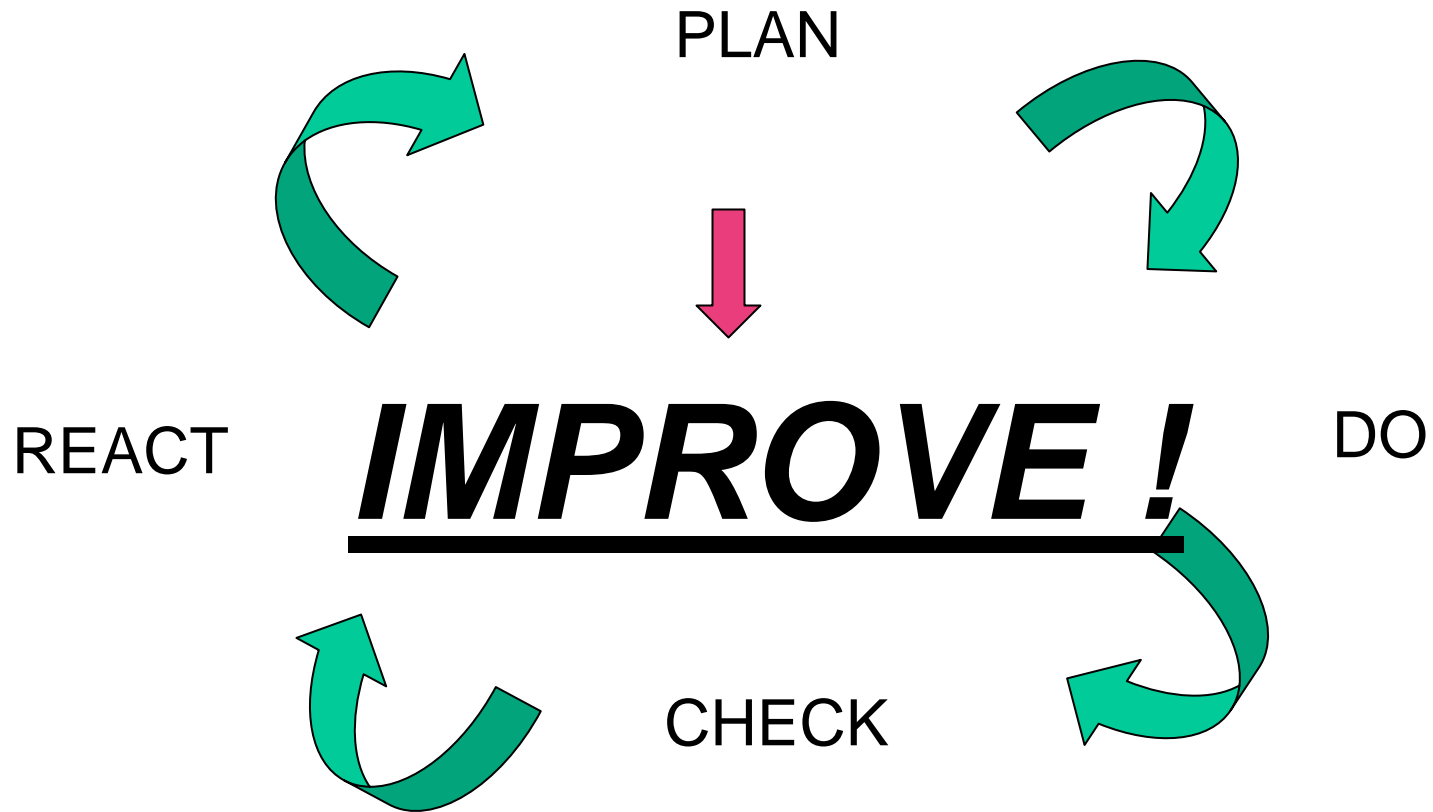 - We can all improve, eh?

Pieces of the System

PLAN

DO

CHECK
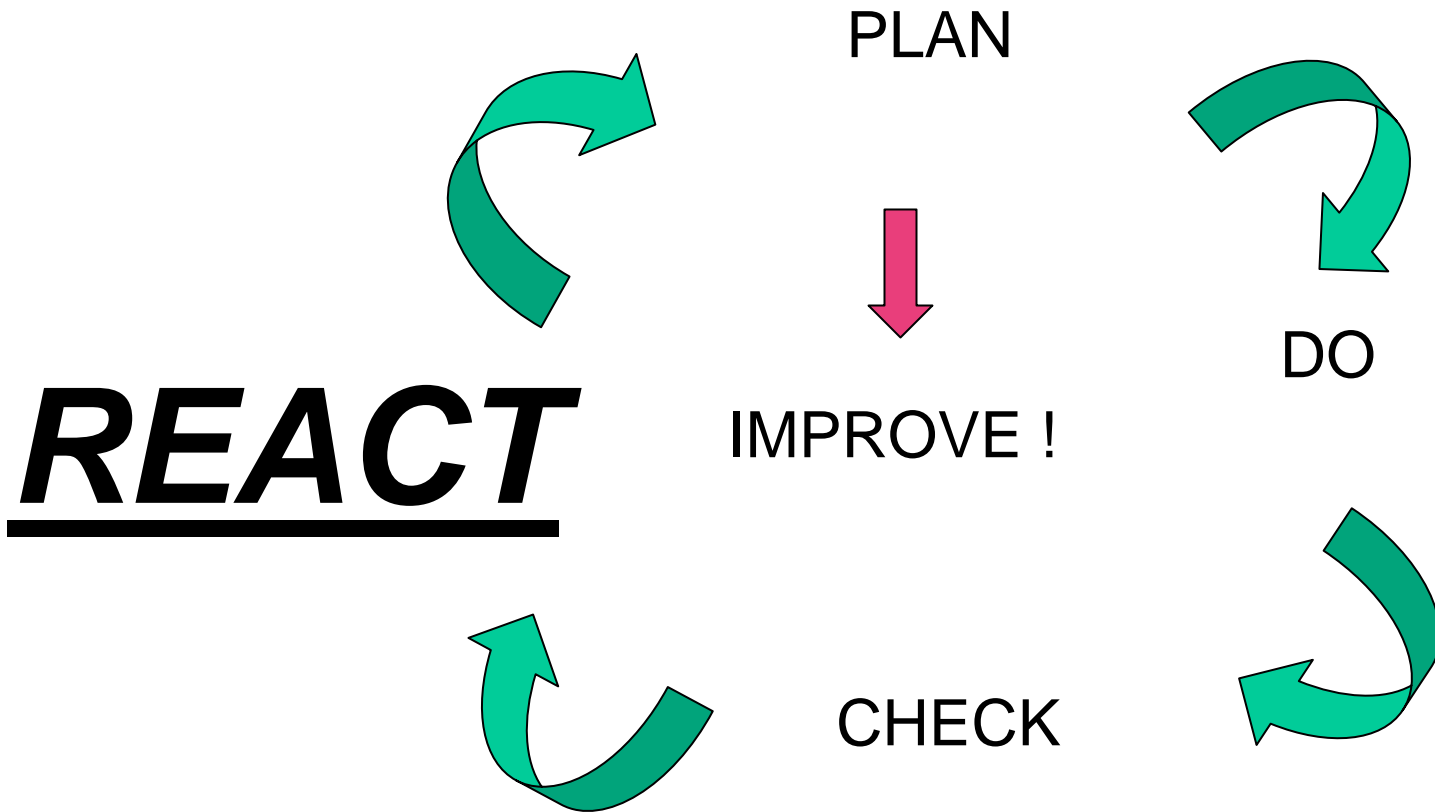
IMPROVE !

REACT

React

- Close the Loop:
  - Take the audit results and use them
  - Improve your processes
  - Record the review
    - At the next audit, you judge how well you met your own expectations

Pieces of the System

PLAN

REACT

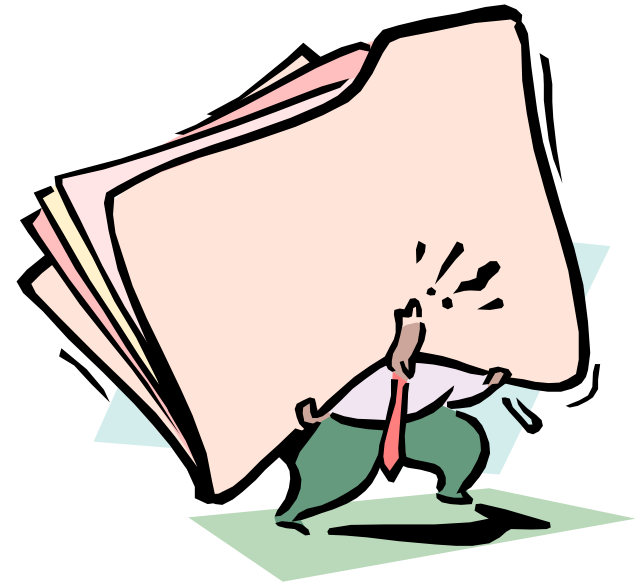# *IMPROVE !*

DO

CHECK

Improvement Happens

- **If you do all four steps, improvement follows**

# DON'T PANIC !!!

Program Responsibilities 1

- Must follow QMP & Policy
- Prepare written SOPs
  - A "Program QA Manual"
  - Formal QAPPs as necessary
  - Existing Procedures OK!
    - **(Write them down!)**
- Review your SOPs and quality system annually
- Fix deficiencies

Program Responsibilities 2

- Report to QA manager:
  - Results of Annual Review
  - Deficiencies found and corrective actions
- Ensure staff & volunteers trained
  - Report training to HR
- Ensure that quality considered in procurements
- Ensure that staff follows procedures

What Will You Produce?
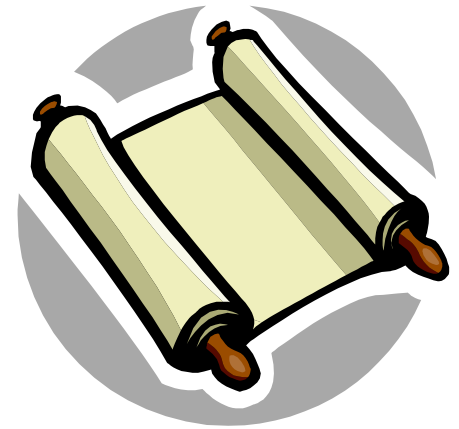
- A set of documents
  - Each program will have its own.

- "Program QA Manual"

- Gathers all the items mentioned above

QA Manager Responsibility

- With QA Team:

  - Helps programs to prepare documents

    - ***We're going to provide one-on-one assistance***

  - Approves programs' documents
  - Reviews programs' annual internal reviews
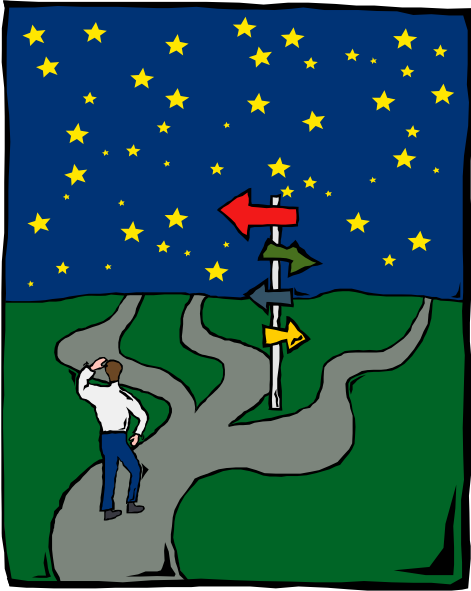 - Reports to Senior Leadership Team
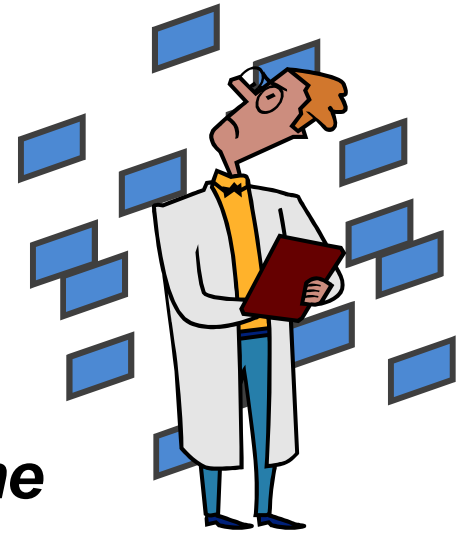
DES Quality Policy

- DES will ensure, within its authority, that all of its programs deliver data of known quality to allow all parties to make appropriate decisions about environmental matters in New Hampshire.

- All programs to have written planning and SOPs in place by 12/31/02.

The Road Ahead

- Help programs get up to speed
- Start review processes

The Goal

- We need people to trust what we say.

- "I'm an expert" doesn't cut it.

- Document *why* what you say is true.

Thank you very much

- Fill out the evaluation form!

- Call Vince (8989) or me (2941)